

CLAIMS

1. A method of fabricating a radial tire, the method comprising:

- 5 a) forming a cylindrical-shaped carcass ply comprising axially extending carcass reinforcing cords;
- b) fitting annular bead hoops onto a radially outer surface of the carcass ply and axially inward of each of the ply edges;
- 10 c) assembling a plurality of breaker plies centrally onto and about the radially outer surface of the carcass ply, the breaker plies comprising a wide breaker ply which extends axially to a position inward of and adjacent to each of the bead hoops;
- 15 d) turning each of the carcass ply edge portions lying axially outwardly of the bead hoops radially outwardly and axially inwardly around the bead hoops to overlie the axial edges of the wide breaker ply;
- e) assembling onto the cylindrical assembly of
- 20 carcass plies, bead hoops and breaker plies, additional components of the tire, including a centrally disposed rubber tread flanked at either side by rubber sidewalls, to form a cylindrical green tire assembly;
- 25 f) shaping the cylindrical green tire assembly into a toroid; and

g) molding the cylindrical green tire assembly in a heated tire mould to form the tread pattern in the tread and vulcanize the molded assembly.

2. The method as recited in claim 1, wherein at least one of the breaker plies is of smaller axial width than the wide breaker ply, and wherein, during step c), the breaker ply of smaller axial width is disposed between the carcass
5 ply and the wide breaker ply.

3. The method as recited in claim 1, wherein at least one of the breaker plies is of smaller axial width than the wide breaker ply, and wherein, during step c), the wide
5 breaker ply is disposed between the carcass ply and the breaker ply of smaller axial width.

4. The method as recited in claim 1, wherein the breaker plies comprise a plurality of breaker plies of smaller axial width than the wide breaker ply, and wherein, during step c), the wide breaker ply is disposed between the
5 carcass ply and the breaker plies of smaller axial width.

5. The method as recited in claim 1, wherein, prior to step d), a rubber apex of generally triangular cross-section

is fitted about the carcass ply axially inward of and adjacent to each of the bead hoops.

6. The method as recited in claim 5, wherein, during step c), the edges of the wide breaker ply are placed over the apexes.

7. The method as recited in claim 5, wherein, during step c), the edges of the wide breaker ply are placed between the carcass ply and the apexes.

8. The method as recited in claim 5, wherein, during step c), the edges of the wide breaker ply are disposed axially inward of the apexes.

9. The method as recited in claim 1, wherein, during step f), axially outer bead regions of the cylindrical green tire assembly are moved axially inward while a central crown region of the cylindrical green tire assembly is moved
5 radially outward.